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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/068,970	02/11/2002	Kohshi Yoshimura	000028A	3916

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EXAMINER

DONOVAN, LINCOLN D

ART UNIT PAPER NUMBER

2832

DATE MAILED: 05/25/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/068,970	Applicant(s) YOSHIMURA ET AL.	
	Examiner Lincoln Donovan	Art Unit 2832	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 March 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) 13-16 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-12 17-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11 February 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-11 and 17-20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claims 1 and 17, applicant should clarify the structure and/or particle size intended by the particles of the fine metal powder having a *longer* diameter. It is not clear what is *longer* what the length is related to.

Regarding claim 17, lines 3-5, lack sufficient structure for the functional language of "placing a rare earth metal-based permanent magnet...in said treating vessel so as to form..." In lines 5-6, applicant should clarify the specific conditions "sufficient to form said film layer on the metal surface of said magnet."

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-3, 5-8, 10-11 and 17-20, as best understood in view of the rejections under USC 112, 2nd paragraph, are rejected under 35 U.S.C. 103(a) as being unpatentable over Mita et al. [US 5,684,352] in view of Yoshimura et al. [JP 09-289108].

Regarding claims 1, 7-8, 10-11 and 17-20, Mita et al. discloses a bonded rare earth metal-based permanent magnet having a film layer made of a fine metal powder directly on a metal formed on the surface of the magnet [column 15, line 64-column 16, line43].

Mita et al. disclose the instant claimed invention except for the specific thickness of the film layer.

Yoshiyama et al. disclose a film layer on a permanent magnet being relatively thin.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use a thin layer thickness for the metal layer of Mita et al., as suggested by Yoshiyama et al., in order to improve adhesion and maintain the desired magnetic properties.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to vary the thickness, since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. In re Boesch, 617 F.2d 272, 205 USPQ 215 (CCPA 1980).

Regarding claims 2-3, Mita et al. disclose the film layer being copper [column 16, lines 24-26].

Regarding claims 5-6, Mita et al. disclose the film layer being aluminum [column 16, lines 24-26].

Claims 4 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mita et al., as modified, as applied to claim 1 above and further in view of Takaguchi et al. [JP 09007810]

Mita et al., as modified, disclose the instant claimed invention except for the specific hardness of the film layer.

Takaguchi et al. disclose a film layer on a permanent magnet having a low hardness metal plating layer.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use a low hardness plating layer for the metal layer of Mita et al., as suggested by Takaguchi et al., in order to stop up pin holes.

The specific hardness used would have been obvious to one having ordinary skill in the art at the time the invention was made to vary the hardness, since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. In re Boesch, 617 F.2d 272, 205 USPQ 215 (CCPA 1980).

Response to Arguments

Applicant's arguments filed 02-14-05 have been fully considered but they are not persuasive.

Applicant argues:

[1] the steps recited in claim 17 are not indefinite;

[2] the method of forming the layer on the magnet is not shown by Mita et al.; and

[3] Mita et al. does not teach the film layer as presently claimed.

Examiner disagrees:

Regarding [1]: Applicant, in claim 17, recites "A rare earth metal-based permanent magnet..." Applicant notes that, see applicant's arguments filed 02-14-05, page 7, paragraph 1, the claim recites **a step of** "placing' (1) a rare earth..., and thereafter **the step of** 'vibrating and/or agitating' both..." Applicant clearly recites method steps in an article claim without any structural support.

Regarding [2] Mita et al. teaches a layer being formed on the magnet, see column 16, lines 20-30.

Regarding [3] Applicant has not clearly clarified what is meant by "longer diameter." Nor has applicant shown any specific advantage achieved by using the "longer diameter." that is not taught or reasonably obtained by Mita et al. or a skilled artisan.

Conclusion


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lincoln Donovan whose telephone number is 571-272-1988. The examiner can normally be reached on M-F 8-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Enad Elvin can be reached on 571-272-1990. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2832

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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